

ABSTRACT

A reinforcing material-having functional sheet which comprises a sheet-like functional material comprising a functional powder and a binder resin and, laminated thereon, a reinforcing sheet comprising a woven fabric or a non-woven fabric, which are bonded, wherein the basis weight of the reinforcing sheet, the fiber diameter of the fiber constituting the reinforcing sheet and the functional sheet thickness are in specific ranges.

10 A sheet-like electrode for electric double layer capacitors which electrode comprises a sheet-like electrode of carbon fine powder and a fluorine-containing polymer resin and, laminated thereon, the reinforcing sheet, and an electric double layer capacitor having this electrode.

15 The functional sheet has strength and no elimination of the functional material powder, and also efficiently exhibits high functional properties. The sheet electrode can efficiently prepare electric double layer capacitors having strength, remarkably low internal resistance, slight lowering
20 of charging and discharging capabilities, excellent durability and long lifetime.